



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

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Ref: 8HWM-SR

Mr. Deane H. Zeller
United States Department of Interior
Bureau of Land Management
Salt Lake District Office
2370 South 2300 West
Salt Lake City, Utah 84119

Re: Review of Silver Maple
Claims Site Inspection
Report

Dear Mr. Zeller:

Pursuant to Section 120(d) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), it is EPA's responsibility to assess and evaluate preliminary assessment and site inspection (PA/SI) submittals from Federal facilities on the Federal Agency Hazardous Waste Compliance Docket (docket) to determine priorities among releases and inclusion of such facilities on the National Priorities List (NPL).

Silver Maple Claims is a docket facility and therefore EPA has reviewed the Silver Maple Claims Draft SI Report submitted on October 31, 1988, against the criteria established by EPA for an SI.

The purpose of an SI is to determine if a CERCLA release has occurred, as well as to collect pertinent information regarding targets, waste sources and pathways. The goal of an SI is to provide EPA with information adequate to determine whether or not a Hazard Ranking System (HRS) score should be developed. An SI must provide at a minimum the following information:

1. Determination of the source and composition of wastes,
2. Findings as to whether there has been a release of wastes from the source to ground water, surface water or air,
3. Data for HRS scoring, including the potential for releases to occur, based on EPA's manual for developing HRS scores, and
4. Identification of targets, both human and

environmental, for each applicable pathway

Based on the review of the Silver Maple Claims SI, EPA concludes that the study does not fulfill the requirements of an SI. The specific comments supporting our conclusion are enclosed and should be adequately addressed before the Silver Maple Claims SI can be approved by EPA.

If you have any questions or need further clarification on any of the above comments, please contact Ms. Sandra A. Bourgeois of my staff at 303-293-1538.

Sincerely,



David A. Schaller, Chief
Site Evaluation Section

Enclosures

cc: S. Bourgeois

COMMENTS: SILVER MAPLE CLAIMS SI REPORT

The draft site inspection report and associated HRS package for the Silver Maple Claims site are generally of good quality. The report appears to address major hazards of concern which may be associated with the site. However, any direct comparison between Silver Maple Claims and the adjacent Silver Creek Site should be avoided because tailings present on these sites are chemically different. Also, during the review certain other inadequacies were identified. Comments are listed below:

SUMMARY

1. Information should be included on the presence of sensitive environments and significant human populations which could potentially be affected by site contaminants.
2. The report states - "Exceedance of acceptable oral chronic intake (AIC) does not represent an imminent threat to human health ". Ordinarily this is true. However, when the AIC is exceeded by 5-6 orders of magnitude as it is in this case, there probably is a significant threat posed. The SI should reflect this finding.

DEGREE OF RISK TO HUMAN HEALTH AND THE ENVIRONMENT

1. Results of sampling efforts are interpreted, however actual contaminant concentration values for each sample are not provided. It would prove helpful to include a map with sample locations and a table showing the significant values associated with these samples.
2. Paragraph four states that "the decrease in silver and mercury and the increase in lead appears attributable to both ground water dilution for silver and mercury and an increased lead contribution from ground water contact with onsite tailings." Samples of seeps and springs along the BLM reach of Silver Creek may provide insight into actual lead concentrations contributed to surface water by tributary ground water.
3. Paragraph seven states that lead and mercury levels in ground water exceed those of surface water. However, previous statements attribute decreases in mercury levels in surface water to dilution by tributary ground water. Again, a sample of springs and seeps along the length of the BLM parcel may help clarify whether contaminant concentration is the result of a flow driven or flow dilution relationship

along the stretch of Silver Creek in question.

CONTAINMENT AND ACCESSIBILITY

Some analysis of flood danger to existing tailings piles should be included in this section. Analysis of flood plains and hydrologic events which could potentially wash tailings downstream should be considered.

GROUND WATER CHARACTERISTIC AND USE

An evaluation of water withdrawal from the deeper aquifers in the region should be made. The potential population affected by possible deep aquifer contamination should be considered and the possibility for communication between the shallow alluvial and the deeper aquifers in the region should be considered.

RISK CHARACTERIZATION

Under the heading "Determination of Exposure Pathways", an assessment of exposure to target populations via windblown contaminants should be addressed. The air pathway seems to be the most likely route of exposure and appears to be under-emphasized in this investigation. In order to adequately assess the affects of this site on nearby target populations, an evaluation of airborne contamination should be considered.

HAZARDOUS RANKING SYSTEM SCORE SHEET

The following comments pertain to the HRS Score Sheet prepared for this site investigation:

GROUNDWATER TARGETS

Although the site has scored an observed release to the shallow, alluvial aquifer, there are no significant target populations utilizing this aquifer and therefore no significant score. It is beneficial to evaluate the potential for contaminant migration into the deeper aquifers and document the population served by these deeper aquifers. This method will help adequately assess the potential for significant exposure from the tailings piles via the groundwater route.

SURFACE WATER ROUTE

Under "Distance to Sensitive Environments", the following statement is made: "It is unknown whether there are any sensitive environments in the area but it is assumed that there are none present." This question should be addressed by making inquiries to various officials from the U.S. Fish and Wildlife Service or state and local fish and game commissions.

AIR PATHWAY

In order to adequately assess the impacts of this site on the health of individuals residing in the surrounding area, contaminant migration via the air pathway should be evaluated. Since this pathway is the most likely route for contaminant migration, a detailed sampling regime should be applied to the air route around the tailings piles. In order to adequately assess the effects of the tailings on human health and the environment, the contribution of these tailings to the ambient air around the site should be documented.